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10/658,613

09/08/2003

William James Cassarly

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3017 7590 07/15/2004

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EXAMINER

HASAN, MOHAMMED A

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,613

Applicant(s)

CASSARLY ET AL.

Examiner

Mohammed Hasan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 - 27 is/are allowed.
- 6) ☒ Claim(s) 28 - 33 is/are rejected.
- 7) ☒ Claim(s) 34 - 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/2/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Oath/Declaration***

1. Oath and declaration filed on 9/8/2003 is accepted.

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***Information Disclosure Statement***

2. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 12/2/2003 have all been considered and made of record (note the attached copy of form PTO – 1449).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28, and 31 - 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffman et al (5,343,330).

Regarding claim 28, Hoffman et al discloses (refer to figure 1 – 3) a lens assembly (1) for directing light output from a light source forwardly along an optical

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axis, lens assembly comprising: a total internal reflection collector component (6) collector having an input end, an output end and a focal length, and a projector component (7), projector component having an input end and an output end, projector component in fixed spaced relation to collector component, wherein parallel rays of light entering output end of projector component are reflected and refracted by lens assembly to fall entirely on light source (89) (e.g., LED) (column 4, lines 25 – 68, column 5, lines 1 – 8) .

Regarding claim 31, Hoffman et al discloses (refer to figure 1 and 3) collector portion (7) comprising: a rear surface, an outer side wall, a cavity extending into collector portion from rear surface, cavity having (2) an inner side wall and a front wall, light source (89) substantially within cavity (2) (column 4, line 35, column 5, line 10).

Regarding claim 32, Hoffman et al discloses, an outer sidewalls are outwardly tapered between rear surface and transition section (column 4, lines 51 – 60).

Regarding claim 33, Hoffman et al discloses, wherein an outer sidewalls are hemispherical between rear surface and transition section (column 4, lines 51 – 60).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al (5,343,330) in view of Marshall et al (6,547,423 B2).

Regarding claims 29 and 30 as applied to claim 28, Hoffman et al discloses all of the claim limitations lens is glass and collector component and projector component are glass and projector component are an optical grade polymer. However, Marshall et al discloses lenses made of glass and further lenses made of a thermoplastic synthetic resin (i.e., polymer) (column 5, lines 14 – 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a lens with glass component and thermoplastic synthetic resin such as polymer in to the Hoffman et al a non imaging lens for the purpose of beam divergence and beam uniformity as taught by Marshall et al (column 2, lines 28 – 29).

***Allowable Subject Matter***

5. Claims 1 – 27 are allowed.

6. The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in a combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 1 and 25, for example which include, a lens for directing light output from a light source having an overall length is longer than

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the focal length of collector portion (claim 1); and collector portion collimates and homogenizes first and second portions of light output to form a circular, uniformly illuminated near field image within transition section and projector section projects circular image into far a far field of assembly (claim 25); and a transition portion extending between collector portion and projector portion and transition portion having a length is longer than the focal length of collector portion (claim 26).

7. Claims 34 – 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show outer sidewalls are elliptically curved between rear surface and output end of collector, front wall is convexly curved toward the light source, a front surface of projector section is convexly curved, and curved front surface of projector section and outer side wall of collector section are faceted.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest prior art

Avis (6,642,667 B2) discloses, a flashlight includes a motion detector and a light intensity detector for automatic shutoff of the flashlight when unused for a period of time.

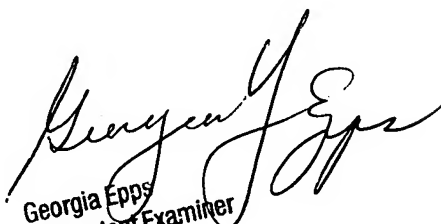
**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272- 2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MH  
June 22, 2004

  
Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800